

IGCSE Biology

Name: _____ Score: _____

1. Which part of the cell contains DNA and controls the cell?
 - ☐ nucleus
 - ☐ cytoplasm
 - ☐ cell membrane
 - ☐ mitochondria
2. A red blood cell is specialised to carry oxygen. It has:
 - ☐ no nucleus and lots of haemoglobin
 - ☐ a large nucleus
 - ☐ chloroplasts
 - ☐ a tail
3. Magnification is calculated as:
 - ☐ image size $\div$ actual size
 - ☐ actual size $\div$ image size
 - ☐ image size $\times$ actual size
 - ☐ image size $+$ actual size
4. Which part releases energy by respiration?
 - ☐ mitochondria
 - ☐ nucleus
 - ☐ cell wall
 - ☐ vacuole
5. A group of similar cells working together is a:
 - ☐ tissue
 - ☐ organ
 - ☐ organ system
 - ☐ organism
6. An image is 40 mm across and the real object is 0.5 mm. What is the magnification?

7. Which parts are found ONLY in plant cells? (Select all that apply.)

- ☐ cell wall
- ☐ chloroplasts
- ☐ large vacuole
- ☐ nucleus

Tick every correct option.

8. A root hair cell's long shape gives it a large surface area for absorbing water.

- ☐ True ☐ False

9. An image is 60 mm and the magnification is $\times 300$. What is the actual size (mm)?

10. Several different tissues working together form an _____.

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1. **nucleus**

The nucleus holds DNA and controls the cell.

2. **no nucleus and lots of haemoglobin**

No nucleus leaves more room for haemoglobin, which carries oxygen.

3. **image size $\div$ actual size**

Magnification = image $\div$ actual.

4. **mitochondria**

Mitochondria are the site of aerobic respiration.

5. **tissue**

A tissue is a group of similar cells.

6. **80**

$40 \div 0.5 = \times 80$.

7. **cell wall; chloroplasts; large vacuole**

The nucleus is in both; the cell wall, chloroplasts and large vacuole are plant-only.

8. **True**

Its structure fits its function of absorption.

9. **0.2**

Actual = $60 \div 300 = 0.2$ mm.

10. **organ**

An organ is made of several tissues.